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### BOSTON REDEVELOPMENT AUTHORITY

# SCOPING DETERMINATION BOSTON CROSSING

STON PUBLIC LIBIOLOGIA

SUBMISSION REQUIREMENTS
FOR DRAFT PROJECT IMPACT REPORT (DPIR)

PROPOSED PROJECT: Boston Crossing

PROJECT LOCATION: Chauncy, Washington, and Summer Streets,

and Hayward Place

DEVELOPER: Campeau Massachusetts, Inc.

PNF SUBMISSION DATE: October 4, 1988, as amended January 23,

1989

The BRA is issuing this Scoping Determination pursuant to Section 31-5 of the Boston Zoning Code (the "Code"). The Applicant filed a Project Notification Form ("PNF") on October 4, 1988, and amended it on January 23, 1989. This Scoping Determination requests information required by the Boston Redevelopment Authority ("BRA") for its review of the Proposed Project in connection with the following:

- a) Development Review pursuant to Article 31 of the Code;
- b) Recommendations to the Board of Appeal with respect to the zoning relief required for the Proposed Project, pursuant to Articles 6, 6A, and 38 of the Code;
- Approval of a Development Impact Project Plan, pursuant to Article 26A of the Code, and the entering of agreements for the Development Impact Project Contribution and Jobs Contribution Grant, pursuant to Articles 26A and 26B of the Code; and
- d) Approval of a Development Plan pursuant to Section 38-10 of the Code in conformity with the procedures set forth in Sections 3-1A.a and 38-12 and the provisions of Sections 38-11 through 38-16.

#### PREAMBLE

The BRA is reviewing the Proposed Project pursuant to multiple sections of the Code. The Proposed Project is subject to BRA review and approval pursuant to Article 31 of the Code,

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Development Review Requirements, which sets out a comprehensive procedure for project review, and requires the BRA to review the design, transportation, environmental, and other impacts of proposed projects. Article 31 requires the submission of a satisfactory Final Project Impact Report prior to the issuance of a building permit.

In addition, the Proposed Project requires zoning relief pursuant to Articles 6, 6A, and 38 of the Code. The substantive review requirements imparted by these sections address related, but not identical issues which are the basis of Article 31 review. The reviews, however, overlap to a significant degree. Therefore, the BRA is incorporating its review of zoning relief for the Proposed Project into the Article 31 process to eliminate regulatory duplication and consolidate the Proposed Project's review into one process and one set of documents.

The Proposed Project is located in an area in which Planned Development Areas (PDAs) are permitted within the Midtown Cultural District. Since the Proposed Project exceeds the as-of-right limits of Article 38, it will be reviewed pursuant to Sections 38-10 through 16 which establish procedures and requirements for PDAs. The BRA shall treat the submission for Article 31 as an application for Development Plan approval, and shall consolidate the application for Development Plan approval with the DPIR as one set of documents. The DPIR, as an application for Development Plan approval, must be prepared in accordance with Sections 38-10 through 16. This Scope references certain requirements applicable to projects seeking Development Plan approval in PDAs in the Midtown Cultural District with which the Proposed Project must conform.

#### I. BOSTON CROSSING PROPOSED PROJECT DESCRIPTION

According to the PNF filed on October 4, 1988 the Proposed Project, located on a 7.46 acre site at Downtown Crossing, is bounded by Chauncy, Summer, and Washington Streets and Hayward Place and includes the creation of three new office buildings, new and redeveloped retail space, below-grade parking and loading facilities, and cultural and neighborhood facilities. Uses presently occupying the site include Jordan Marsh, Lafayette Place, the Lafayette Hotel, and a 1,024-car underground garage.

The characteristics of the Proposed Project described in that PNF include:

TOTAL SQUARE FEET: (1) 3,439,000

OFFICE: 1,600,000

Northern Component: 750,000 Southern Component: 850,000

RETAIL: 1,426,000

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Jordan Marsh: 506,000 Specialty Retail: 645,000 Bloomingdales: 275,000

HOTEL: 413,000

PARKING: 1700-2000 spaces SITE AREA: 324,773

PROPOSED HEIGHTS: 295'/85'/465'

PROPOSED FAR: 10.6 (9.6 with one FAR bonus for

ground floor uses)

(1) The PNF includes a provision for daycare / cultural / neighborhood facility space of 50,000 square feet either on or off-site which is not included in the total GSF for the Proposed Project. If such space were located on-site, total GSF for the Proposed Project would be 3,489,000.

On January 23, 1989, the proponent notified the BRA of an amendment to the PNF. Changes to the Proposed Project included the consolidation of the twin towers in the northern component into one tower, lowering the tower on the southern component, a reduction in office square footage and the addition of retail square footage. This amendment was later clarified on February 10, 1989 and in subsequent project review meetings. The revised project build-out is as follows:

TOTAL SQUARE FEET:		3,365,000
OFFICE: Northern Component: Southern Component:	729,000 720,500	1,449,500
RETAIL: Jordan Marsh: Specialty Retail: Bloomingdales:	473,000 694,500 258,000	1,425,500
HOTEL:		413,000
DAYCARE:	-	12,000
HEALTH CLUB:		55,000
GALLERY/MUSEUM:		10,000

PARKING: 1700-2000 spaces

SITE AREA: 324,773

PROPOSED HEIGHTS: 400'/137'/437'

PROPOSED FAR: 10.36 (9.36 with one FAR bonus for ground floor retail)

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# II. THE MIDTOWN CULTURAL DISTRICT PLAN AND ARTICLE 38 OF THE CODE

On January 12, 1989, the BRA adopted the Midtown Cultural District Plan (the "Plan") as the portion of the general plan for the city governing the Midtown Cultural District. On March 6, 1989, the Boston Zoning Commission amended the Code to incorporate Article 38. Article 38 of the Code establishes the zoning regulations which are the legal framework for the realization of the Plan. Pursuant to Article 38, the Proposed Project is located within the Midtown Cultural District.

The Midtown Cultural District Plan was developed to guide the reemergence of Midtown Boston as a center of commerce, culture, and city life. The program that emerged from the community-based planning process calls for the creation of a mixed-use downtown community which will link the Back Bay and Financial District office markets, and reconnect downtown's residential neighborhoods with each other and with the Boston Common and Public Garden.

The primary purposes of the new zoning plan are:

- o To direct the Downtown economy in a way that promotes balanced growth for Boston, by preventing overdevelopment of the Financial District and Back Bay commercial areas;
- o To revitalize Midtown as the region's center the performing arts, by creating new cultural facilities and rehabilitating existing theaters;
- o To protect and provide for expansion of the thriving Chinatown neighborhood, by creating affordable housing, by controlling institutional expansion and by providing neighborhood business opportunities;
- o To preserve the historic resources of the district by giving legal protection to more than 100 historic buildings; and
- o To create a new residential neighborhood downtown.

#### Planned Development Areas

Article 38 establishes areas in which PDAs are permitted in order to encourage large-scale private development on underutilized sites while insuring quality design through strict design guidelines and environmental impact standards. Developments within PDAs are required to provide benefits, such as cultural and community facilities, historic restoration, or affordable housing, so as to realize the goals of the Midtown Cultural District Plan.

Pursuant to Section 38-10 of the Code, the Proposed Project is located within an area in which the establishment of PDAs is permitted in the Midtown Cultural District. Specifically, the Proposed Project is located in PDA-II which has a maximum building height range of 155 to 400 feet and FARs of 10 to 14.

### Public Benefits in Planned Development Areas

Projects in PDAs must provide benefits sufficient to outweigh burdens in one or more of the following ways:

- (a) the construction of a theater or other cultural facility;
- (b) the rehabilitation of certain identified landmarks and theaters, or
- (c) the provision of Affordable housing.

#### Theaters or Cultural Facilities

The core of the Midtown Cultural District Plan is the creation of a new center for culture and performing arts. Boston's non-profit arts community and the office of Arts and Humanities has developed a facilities plan to meet the needs of existing arts groups for affordable space. Accordingly, the Midtown Cultural District Plan calls for the creation of:

- o A 799-seat Proscenium Theater: to be used by larger dance and theater productions and as a transfer house for productions out-drawing smaller facilities.
- o A 499-seat Dance Theater: to be used by the over one dozen established local dance groups and the City's one major dance presenter.
- o A 499-seat Flex-Space Theater to be used by the more than 20 local drama groups.
- o A 499-seat Asian Arts Theater: to be part of an Asian Arts Center for use by both local and visiting companies.
- O A 400-seat Concert Hall: to be used by mid-sized music groups and medium range productions.
- o A 200-seat Concert Hall: to be used by local folk and jazz groups, and over a dozen small classical and world music groups.
- o A 250-seat experimental Performance Art Theater: To be used for performance art.
- o A 199-seat Dance Theater: to be used by small or emerging dance groups.

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o Two 199-seat "Black Box" Theaters: to be used by local drama and dance groups for new and experimental work.

The DPIR must specify how the Proposed Project meets the objective of the Plan to create facilities, as noted above, in accordance with Section 38-14.1 <u>Development Plan Approval for Development of a New Theater or Other Cultural Facility</u>, should the proponent choose to meet its public benefit requirement by complying with this section.

#### Rehabilitation of landmarks or theaters

The Midtown Cultural District's large concentration of late 19th and early 20th century theaters is one of the best examples of an early theater district in the country. However, many of the district's most important historic buildings are in poor condition and need to be renovated.

The DPIR for the Proposed Project must specify how the Proposed Project meets the historic preservation goals of the Plan in accordance with Section 38-14.2 <u>Development Plan Approval for Substantial Rehabilitation of Existing Theaters, Historic Buildings and Landmarks</u>, should the proponent choose to meet its public benefit requirement by complying with this section.

#### Affordable Housing

The Midtown Cultural District Plan sets a goal of adding 3,000 mixed-income units in the Midtown area with 25 percent affordable for low and moderate-income households. Five hundred of the 3,000 units are to be located in Chinatown. The DPIR must describe how the Proposed Project proposes to achieve the goals of the Plan with respect to affordable housing. Such proposal must meet the requirements of Section 38-14.3 Development Plan Approval for Creation of Affordable Housing, should the proponent choose to meet its public benefit requirement by complying with this section.

#### Housing and Jobs Linkage

The Midtown Cultural District Plan envisions the targeting of housing and jobs linkage monies from Midtown developments to benefit Chinatown. Such funds would be used by Chinatown Community groups to design, build, and manage new housing in the neighborhood, and to create approximately 1,000 job training slots.

Projected office developments in the Midtown Cultural District are expected to generate about \$25 million in housing linkage funds. These funds will help finance the Chinatown Housing Improvement Program's (CHIP) construction of 500 units of affordable housing in Chinatown and at least 150 units of



affordable housing on the Hinge Block. The CHIP program addresses the neighborhood's overwhelming need for affordable housing. There are five parcels of land owned by the city on which 500 units of housing will be built: Parcel R3/R3A, Parcel R-1, Parcel P-2, Parcels P-3, P-4, P-4A, and Parcel P-12. The DPIR should address how the Proposed Project's housing linkage contribution will be used to further the housing goals of Chinatown as expressed in the Midtown Cultural District Plan. The Applicant should expand on its draft proposal to assist in the R3/R3A development, to fund a Housing Stabilization Program which would allow homeowners to borrow funds at below market interest to improve housing stock, to assist in the development of a Chinatown community center, and to conduct engineering studies of neighborhood groundwater problems.

The Midtown Cultural District Plan also includes programs and policies ensuring that members of the Chinatown community have access to the approximately 8,500 construction jobs and 15,000 permanent jobs which will be created in the district.

Since Chinatown is directly affected by major developments planned for the Midtown Cultural District, all of the 1,000 jobs training slots created by jobs linkage funds from Midtown developments will be made available to Chinatown residents. The Plan requires that developers create job training programs that will prepare Chinatown/South Cove residents for jobs at Midtown project sites:

The DPIR for the Proposed Project should detail how the jobs linkage contribution for the Proposed Project will be used to further the objective of the Plan to train neighborhood residents for both the construction and permanent job opportunities created by Midtown development. The Applicant should provide additional information on its draft proposal to fund a Retail Training Academy to train managers and entry-level workers; to sponsor business incubator workshops to train entrepreneurs without previous experience to get a start in business; and to fund an English as a Second Language (ESL) program.

# Daycare Facilities

The future economy of the Midtown Cultural District will depend, to a large extent, on the ability of its employers to attract and retain qualified workers. The continuing movement of women into the workplace has resulted in a growing need for safe, affordable day care outside the family home. Article 38 requires that a Proposed Project over one million square feet devote at least 12,000 square feet to day care facilities, either on-site or offsite, within the Midtown Cultural District, Bay Village, or Chinatown. However, at least 4000 square feet must be on-site. The DPIR must specify the location and program for daycare for the Proposed Project in accordance with Section 38-18.4.

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#### Neighborhood Business Opportunities

Article 38 requires that an Applicant for a Proposed Project over 50,000 square feet use Best Efforts to market space within a Proposed Project to Neighborhood Business Establishments from Chinatown. Such Best Efforts must be detailed in a Neighborhood Business Opportunity Plan. The DPIR must contain such a Plan in accordance with Section 38-18.3.

# General Design and Environmental Impact Standards in Planned Development Areas

Projects in PDAs must also adhere to certain design and environmental impact standards in addition to those set forth in Article 31 of the Code. These standards concern shadow and wind impacts, transportation access, the skyline, landmarks and historic buildings, and the pedestrian environment. Specific submission requirements necessary to show compliance with these provisions of the Plan are detailed in Sections II, III, IV and V of this Scoping Determination.

#### Development Plan Approval

Projects in PDAs must proceed according to a Development Plan approved after public hearings by the BRA and the Zoning Commission. The Board of Appeal must approve any exceptions sought. A Development Plan will not be approved by the Boston Redevelopment Authority unless it finds that:

- (a) such Development Plan is in substantial accord with the provisions of Section 38-12 (Standards for Development Plan Approval), Section 38-14 (Public Benefit Criteria), and Section 38-16 (General Design and Environmental Impact Standards);
- (b) such Development Plan conforms to the Midtown Cultural District Plan and the general plan for the city as a whole;
- (c) each Proposed Project described in the Development Plan is in substantial accord with the building height and FAR standards set forth in Section 38-11 (PDAs: Use and Dimensional Regulations) and Table A of Article 38; and
- (d) on balance, nothing in such Development Plan will be injurious to the neighborhood or otherwise detrimental to the public welfare, weighing all the benefits and burdens including, without limitation, factors identified in Section 38-14 (Public Benefit Criteria) and Section 38-16 (General Design and Environmental Impact Standards).

The Draft Project Impact Report must address how the Proposed Project meets the objectives of the Midtown Cultural District Plan and conforms with Article 38. The DPIR, as an application

for Development Plan approval, must address how the Proposed Project conforms to Sections 38-10 through 16. In addition, the Draft Project Impact Report for the Proposed Project should specifically address the criteria provided in the Code that must be satisfied in connection with all of the various types of zoning relief required for the Proposed Project.

# III. MASSACHUSETTS GENERAL LAWS CHAPTER 121A/BEDFORD WEST URBAN RENEWAL PLAN

Portions of the Proposed Project are governed by 121A Agreements executed pursuant to Chapter 652 of the Acts of 1960 and Massachusetts General Laws Chapter 121A and are therefore subject to the conditions of those Agreements. Any proposed changes to the 121A Agreements are subject to approval by the BRA and the Mayor of the City of Boston. In addition, a portion of the Proposed Project site lies within the Bedford-West Urban Renewal Area. Any minor modifications to the Urban Renewal Plan are subject to the approval of the BRA. Approval of the Draft or Final Project Impact Report does not constitute approval of a change in status of the 121A Agreements, nor does it constitute approval of any possible modification to the Urban Renewal Plan.

#### IV. DEVELOPMENT REVIEW REQUIREMENTS - ARTICLE 31

Article 31 of the Code institutes a process by which large-scale development projects will be reviewed by the BRA. As previously stated, the BRA is issuing this Scoping Determination pursuant to Section 31-5. The Scoping Determination includes requests for certain information for an alternative development option for the Proposed Project. The Draft Project Impact Report must conform to Article 31 and to this Scoping Determination.

# All information in the Submission Requirements below must be supplied for each of the following development options:

A. As-of-Right Option pursuant to Article 38, Section 7

A project based on Section 38-7 which states that a Proposed Project within the Midtown Cultural District is allowed at an as-of-right height of 155 feet and an as-of-right FAR of 10 if such Proposed Project is subject to Article 31 and is subsequently certified as in compliance with Article 31.

B. Planned Development Area Option pursuant to Article 38, Section 10

The Proposed Project is located in PDA II in which projects having heights of 155 feet to 400 feet and FARs of 10 to 14 may be permitted in accordance with the procedure set forth in Section 3-1A.a and Section 38-12, and in accordance with



the substantive requirements set forth in Sections 38-11 through 38-16.

The project as proposed in the Amendment to the PNF filed January 23, 1989 and later clarified February 10, 1989 and in subsequent project review meetings exceeds the as-of-right dimensional requirements. Therefore, this Option may be studied as a PDA pursuant to Section 38-10.

#### Submission Requirements

In addition to full-size scale drawings, 25 copies of a bound booklet containing all of the following submission materials reduced to size  $8\frac{1}{2} \times 11$ , except where otherwise specified, are required. In addition, an adequate number of copies must be available for community review.

#### I. GENERAL INFORMATION

### 1. Applicant Information

### a. Development Team

#### 1. Names

- Developer (including description of development entity or Chapter 121A entity)
- b. Attorney
- c. Project consultants
- Business address and telephone number for each
- 3. Designated contact for each
- 4. Description of current or formerly-owned developments in Boston

#### b. Legal Information

- 1. Legal judgments or actions pending concerning the Proposed Project
- History of tax arrears on property owned in Boston by development team
- 3. Evidence of site control over the project area, including current ownership and purchase options of all parcels in the

Proposed Project, all restrictive covenants and contractual restrictions affecting the Applicant's right or ability to accomplish the Proposed Project and the nature of the agreements for securing parcels not owned by the Applicant

- 4. Nature and extent of any and all public access easements into, through, or surrounding the site
- 5. Status and extent of all 121A Agreements governing any portion of the site
- 6. Nature and extent of requirements arising from the Bedford-West Urban Renewal Plan and related Land Disposition Agreement

# 2. <u>Financial Information</u> (See Appendix 1 for required financial information)

- a. Full disclosure of names and addresses of all Financially involved participants and bank References
- b. Development Pro Forma
- c. Ten Year Operating Pro Forma

#### 3. Project Area

a. Description of metes and bounds of project area

### 4. Public Benefits

- a. Article 26a and 26b
  - o Development Impact Project Contribution and Jobs Contribution Grant. The amount of the linkage contribution and the method of contribution (payment or creation) must be specified.
  - o Description of housing creation proposal and job training programs

#### b. Chapter 121A

o Increase in tax revenues and or 121A payments, specifying existing and estimated future annual property taxes

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- c. Article 38, Section 14
  - o The DPIR must propose a plan for public benefits in accordance with the provisions of Section 38-14, including one or more of the following:
    - o The development of a theater or other cultural facilities
    - o The substantial rehabilitation of a Landmark, Historic building or an existing theater; or
    - o The provision of Affordable Housing
- d. Article 38, Section 18
  - o Neighborhood Business Opportunity Plan describing Best Efforts to provide opportunities for local businesses and entrepreneurs
  - o Description and location of day care facilities. An amount equal to at least 12,000 SF must be provided either on-site or within the Midtown Cultural District, Bay Village, or Chinatown provided that at least 4000 SF is on-site.

#### 5. Employment

- a. Anticipated employment levels including the following:
  - 1. Estimated number of construction jobs
  - 2. Estimated number of permanent jobs

### 6. Regulatory Controls and Permits

- Existing zoning requirements, zoning computations, and any anticipated requests for zoning relief
- b. Anticipated permits required from other local, state, and federal entities with a proposed application schedule
- c. Because the Proposed Project is subject to the Massachusetts Environmental Policy Act (MEPA), all required documentation and a proposed schedule for coordination with Article 31 procedures



d. Any anticipated amendments to the Bedford-West Urban Renewal Plan and related Land Disposition Agreement

#### 7. Community Groups

a. Names and addresses of project area owners, displacees, abutters, and also any community groups which, in the opinion of the Applicant, may be substantially interested in or affected by the Proposed Project

In accordance with Section 38-15 the proponent must transmit its application for Development Plan approval to appropriate community and neighborhood organizations.

b. A list of meetings proposed and held with interested parties

#### II. TRANSPORTATION COMPONENT

In accordance with Section 38-16 Planned Development Areas:
General Design and Environmental Impact Standards, the
Transportation Access Plan required pursuant to Section 31-6 must
demonstrate that the location of the Proposed Project with
respect to vehicular access and circulation, and proximity to
other transportation systems, is suitable for increased floor
area. By its design and management, the Proposed Project shall
emphasize use of mass transit and feasible measures to be
undertaken to limit the impact of the Proposed Project on traffic
congestion.

The following comments and submission requirements incorporate those of the Boston Transportation Department ("BTD") regarding transportation issues and objectives for the Proposed Project.

The Proposed Project is one of a number of major proposed developments in the Boylston/Essex Street corridor between the Surface Artery and Park Square. In preparation of the Access Plan, every effort must be made to ensure that assumptions, analytical methodologies, and conclusions are consistent. We suggest that this be done through consultation, sharing of data, and mutual review of draft documents.

To minimize the projected impact of vehicular traffic and enhance pedestrian traffic operations, the Applicant must explore various alternatives to existing local vehicular and pedestrian circulation systems. These alternatives include, but are not limited to, the extension of the Downtown Crossing pedestrian zone to Avery Street, the reversal of Hayward Place and Avery Street to provide an access route to Tremont Street for westbound

traffic with associated intersection improvements, and the merging of Avenue de Lafayette with Essex Street at its east end for a connection to the Central Artery.

These and other alternatives to the circulation systems which would more fully utilize the existing public rights-of-way for vehicular access, address desired pedestrian movements to transit facilities and provide for parking, loading and drop-off uses in a manner which does not impact the character of the block, should be considered.

#### 1. TRAFFIC MANAGEMENT ELEMENT

All traffic analyses must be performed for existing circumstances as well as no-build and build scenarios.

#### A. Vehicular Traffic

Vehicular traffic analyses must consider proposed vehicular and pedestrian traffic circulation system revisions including (1) the extension of the Downtown Crossing pedestrian zone to Avery Street, (2) the reversal of Hayward Place and Avery Street and (3) the merging of Avenue de Lafayette to Essex Street at its eastern end.

Vehicular traffic operations must be analyzed in the year of projected full occupancy (1995) and include the following information:

- o Vehicular traffic demand and generation (including weekday daily and a.m. and p.m. peak-hours, and Saturday peak hour), directional distribution by major corridors modal split and vehicle occupancy analysis with assumptions justified and consistent with analysis for the Commonwealth Center and Kingston-Bedford projects
- o Capacity and level-of-service analyses and the impact of the Proposed Project at the intersections listed below and shown in Appendix 4:

Boylston/Tremont
Avery/Tremont
West/Tremont
Temple/Tremont
West/Washington
Essex/Washington
Beach/Washington
Stuart/Washington
Kneeland/Harrison
Beach/Harrison
Essex/Harrison/Chauncy

Harrison/Avenue de Lafayette Chauncy/Avenue de Lafayette Chauncy/Summer Kingston/Summer Kingston/Bedford Kingston/Essex/Avenue de Lafayette Columbia/Essex

In addition, Saturday peak conditions must be analyzed for the following intersections:

Essex/Washington
Essex/Harrison/Chauncy
Harrison/Avenue de Lafayette
Chauncy/Avenue de Lafayette
Chauncy/Summer
Kingston/Bedford

- o Analysis of Proposed Project impact on the intersections and roadway network as shown in Appendix 4 that reflects such phenomena as back-up from one intersection blocking another, pedestrian conflicts, servicing and loading at adjacent buildings, and delays caused by cars weaving
- o Estimated taxi trips to the site
- o Estimated truck and service vehicle traffic to the site

Background projects to be included in the impact evaluation must be reviewed with BRA and BTD staff prior to the analysis. Specific known background projects in the area expected to influence travel patterns in the 1994 conditions include:

- o Parkside East
- o Parkside at Mason
- o 125 Summer Street
- o 600 Washington Street
- o Pavilion at Park Square
- o 146 Boylston Street
- o 40 Franklin Street
- o Kingston/Bedford
- o 90 Tremont Street
- o 110-120 Tremont Street
- o 45 Province Street
- o 64-74 Franklin Street
- o 73 Tremont Street addition
- o 295 Devonshire Street
- o South Cove Parcel C-2
- o Parcel R-3/R-3A

- o Don Bosco
- o Commonwealth Center
- o Post Office Square Park and Garage
- o One Bowdoin Square

The status of these projects must be confirmed prior to analysis and additional projects may be added, as necessary.

## B. Public Transportation

- Location and availability of public transportation facilities
- o Usage and capacity of the existing system
- o Projected transit trip generation resulting from the Proposed Project
- o Peak-hour demand and capacity analysis for each transit corridor and service
- o Discussion of planned or proposed improvements to the mass transit system (such as the South Boston connector, and new entrances into the transit system)

### C. Pedestrian Circulation

The site is located adjacent to Downtown Crossing and the PNF proposes to extend the pedestrian zone on Washington Street to Avery Street. Pedestrians cross the site from numerous directions. Moreover, connections to existing public transportation facilities influence the pedestrian movements in the area. The pedestrian traffic analysis must assess the pedestrian circulation patterns for the year of full occupancy (1995) and address the following issues:

- o Pedestrian conditions in the Transportation Impact Area shown in Appendix 4, including identification of pedestrian activity, circulation deficiencies and barriers, and measures to improve such conditions
- o Demand and capacity analysis on the following project area sidewalks and pedestrianized streets:
  - o all sidewalks and intersections abutting the project
  - o Winter Street
  - o Summer Street from Chauncy to Otis
  - o Bedford Street from Kingston to Chauncy
  - o the Harrison Avenue extension
  - o Washington Street from Essex to Hayward Place







Capacity analyses must include specific pedestrian count data for the weekday a.m., midday, and p.m. peak periods and Saturday peak hours.

- o Identification of pedestrian corridors within the site and in the immediate vicinity of the Proposed Project including the pedestrian zone on Washington Street and its extension to Avery Street, pedestrian connections between Chauncy Street and Washington Street and between Hayward Place and Summer Street (including indoor and outdoor connections through the project open to public crossing). Detail on public easements through and within the site must be provided. Provisions for security and safety must be described.
- o Analysis of impacts on pedestrian circulation from the closing of Avenue de Lafayette and from extending the pedestrian zone on Washington Street to Avery Street
- o Area-wide origin and destination study of pedestrian traffic in site area, including "desire lines" for access through, within, and around the project site
- Site plans for any interior "passageway" proposed as a pedestrian crossing
- o Connections to public transportation station stops
- Effect on pedestrian flows of project parking and service entrances and exits

### D. Loading

- o Number of docks
- o Location and dimension of existing and proposed docks
- o Project demand for loading generated by different uses

## E. Internal Circulation

- o Size and maneuvering space on-site or in public rightof-way and the internal maneuvering space for trucks of all sizes, especially with regard to the disruption of on-street traffic flow by trucks backing in or out
- o Access, curb cuts, and/or sidewalk changes required
- Analyses of access to loading docks under a variety of access scenarios

### F. Mitigation Measures

- o Measures to encourage public transportation use and mitigate project impact on public transit including:
  - o Mass transit information dissemination
  - o MBTA pass sales and subsidies
- o Measures to reduce peaking, including:
  - o Travel demand modifications
  - o Roadway/traffic operation improvements
  - o Encouragement of flexible work hours
  - o Restrictions on service and goods deliveries
- o Measures to mitigate project impacts on pedestrian traffic including:
  - o Improvements to the pedestrian environment
- o Measures to reduce peaking, including:
  - o Encouragement of flexible work hours
  - o Restrictions on service and goods deliveries

## 2. PARKING MANAGEMENT ELEMENT

For the purposes of analyzing parking impacts, the Parking Study Area shown in Appendix 5 must be studied.

The Parking Study Area includes all public parking facilities within a reasonable walking distance of the project, Woolworth's garage, 45 Province Street, the Boston Common garage, the Motor Mart garage, Kingston-Bedford, Washington Street garage, Post Office Square, and the State Transportation Building.

- A. Existing parking conditions in the Parking Study Area, including parking characteristics in proximity to the site supply of parking, both on-and off-street and parking demand by user type and time of day and week
- B. Projected change in background parking supply by 1995 and total area parking supply in 1995
- C. Proposed Project's impact on demand for parking

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- D. Number of spaces provided indicating public and private allocation
- E. Parking plan for the Proposed Project, including layout, access, and size of spaces and the level of utilization of spaces by different user types
- G. Evidence of compliance with City of Boston parking freeze requirements
- H. Detailed discussion of parking management issues for the Proposed Project, including rate structure for public parking spaces, number of high-occupancy vehicle spaces, hours of operation, etc.

# I. Mitigation Measures

Measures to manage and reduce parking demand and optimize use of available parking spaces, including:

- o Structuring rates to discourage all-day use by commuters in single occupancy vehicles
- o Ride-sharing incentives and information dissemination
- o Set-asides for high-occupancy vehicles (specify number and location)
- o Set-asides for after-morning commuter peak (10:00 A.M.) (specify number)
- o The degree to which joint use of spaces can result in lower parking space demand

## 3. CONSTRUCTION MANAGEMENT ELEMENT

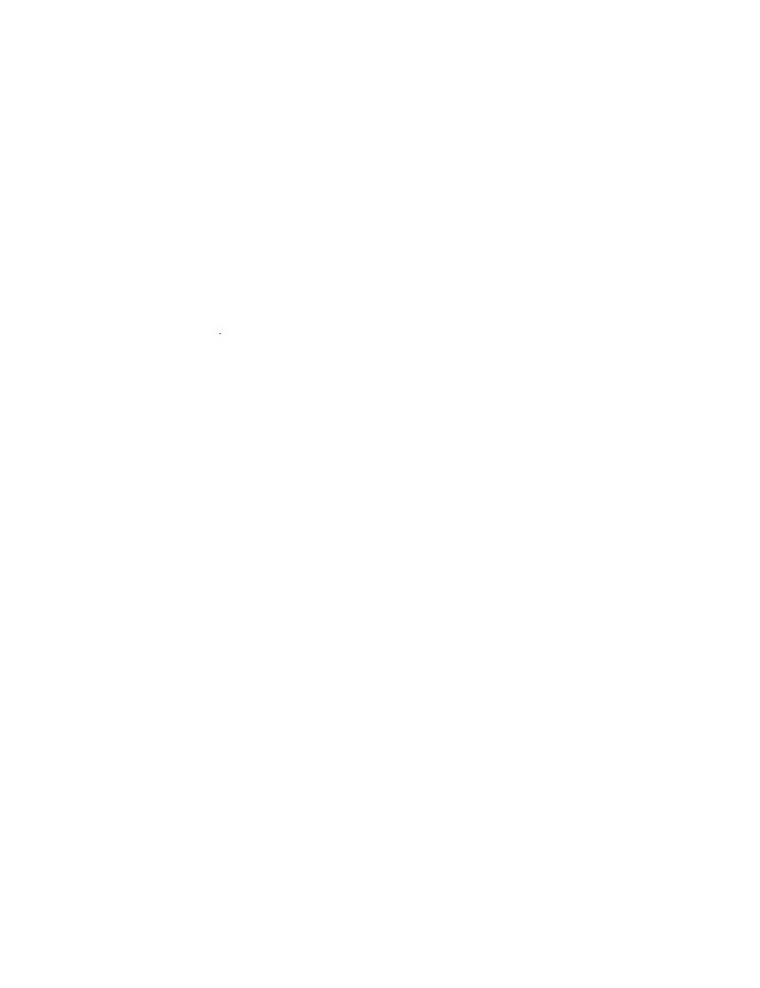
The following information must be included as part of the Draft Project Impact Report.

#### A. Management Plan

- o Hours of construction activity
- Maximum number of construction workers and vehicles per day
- Number of affected travel lanes; location of affected intersections and the extent to which they are affected; location of affected sidewalks and the extent to which they are affected

- o Location of staging and the extent to which it affects the site
- o Construction vehicle timing and routes of deliveries to the proposed project
- o Location of construction vehicle and worker parking (on or off site)
- o Route of any detours, pedestrian or vehicular caused by construction
- B. Mitigation Measures for impacts on pedestrian and vehicular traffic during the construction period including:
  - o Worker parking and commuting plan
  - o Alternative modes of transport for employees and materials to and from the site and restrictions on schedules and routes of vehicular movements
  - o Staggered hours for vehicular movement
  - o Traffic controllers to facilitate equipment and trucks entering and exiting the site
  - o Covered pedestrian walkways
  - o Location of construction staging areas
  - o Measures to protect the public safety and ensure vehicular and pedestrian access to all the streets surrounding the project
  - Appropriate construction equipment and proper storage of materials and equipment
- C. Designation of a liaison between the Proposed Project, public review agencies, and the surrounding businesses and communities

In addition to the foregoing construction management requirements, the Boston Transportation Department requires the submission of a Traffic Maintenance Plan in conformity with the City's Construction Management Program. The requirements for the Traffic Maintenance Plan are attached as Appendix 6.



#### 4. MONITORING ELEMENT

A long-term program to monitor the travel behavior of project tenants and other users of the site must be submitted. Information must include travel mode, vehicle occupancy rate, and employee origin-destination surveys.

## III. ENVIRONMENTAL PROTECTION COMPONENT

#### 1. Wind

In accordance with Section 38-16 <u>Planned Development Areas:</u> <u>General Design and Environmental Impact Standards</u>, the Proposed Project must be designed to avoid excessive and uncomfortable downdrafts on pedestrians. The Proposed Project must be shaped, or other wind-baffling measures must be adopted, so that the Proposed Project will not cause ground-level ambient wind speeds to exceed the standards in Table B of Article 38, reproduced herein in Appendix 2.

A quantitative (wind tunnel) analysis of the potential pedestrian level wind impacts is required for the Draft Project Impact Report. This analysis must determine potential pedestrian level winds adjacent to and in the vicinity of the project site and must identify any area where wind velocities are expected to exceed acceptable levels, including the BRA's pedestrian safety/comfort wind standards (Appendix 2). Particular attention must be given to public and other areas of pedestrian use, including, but not limited to, the entrances to the project and adjacent buildings, the sidewalks adjacent to and opposite the project buildings, the Downtown Crossing pedestrian area, the Boston Common, and the Proposed Project open space areas and pedestrianways. Specific locations to be evaluated will be identified in consultation with BRA staff after preliminary qualitative wind studies have been performed.

The wind tunnel testing must be conducted in accordance with the following guidelines and criteria:

- o Data must be presented for both the future baseline (no-build) and for the future build scenario(s).
- o The analysis must include the mean velocity exceeded 1% of the time and the effective gust velocity exceeded 1% of the time. The effective gust velocity must be computed as the hourly average velocity plus 1.5 x root mean square variation about the average. An

- alternative velocity analysis (e.g., equivalent average) may be presented with the approval of the BRA.
- o Wind direction must include the sixteen compass points.
  Data must include the percent or probability of
  occurrence from each direction on seasonal and annual
  bases
- o Results of the wind tunnel testing must be presented in miles per hour (mph)
- O Velocities must be measured at a scale equivalent to an average height of 4.5-5 feet.
- o The model scale must be such that it matches the simulated earth's boundary and must include all buildings recently completed, under construction, and planned within at least 1,500 feet of the project site. All buildings taller than 25 stories and within 2,400 feet of the project site must be placed at the appropriate location upstream of the project site during the test. Prior to testing, the model must be reviewed and approved by the BRA. Photographs of the area model must be included in the written report.
- o Sampling time must be about (166000/(m x Vgr)) sec, where m is the scale ratio (300-600) and Vgr the gradient velocity in the wind tunnel in mph. The measuring device used to measure the ground winds must have a flat frequency response from dc. to a cut-off frequency of ([m x Vgr]/720) hz.
- o The written report must compare mean and effective gust velocities on annual and seasonal bases, for no-build and build conditions, and must provide a descriptive analysis of the wind environment and impacts for each sensor point, including such items as the source of the winds, direction, seasonal variations etc., as applicable. The report must also include an analysis of the suitability of the locations for various activities (e.g., walking, eating, sitting, etc.) as appropriate, in accordance with recognized criteria.
- The report must also include a description of the testing methodology and model, and description of the procedure used to calculate the wind velocities (including data reduction and wind climate data). Detailed technical information and data may be included in a technical appendix but must be summarized in the main report.

o The report must include maps indicating sensor locations and wind speed data, graphically indicating changes in wind speed due to the project.

For areas where wind speeds are projected to exceed acceptable levels, measures to reduce wind speeds and to mitigate potential adverse impact must be identified and tested in the wind tunnel.

## 2. Shadow

In accordance with Section 38-16 Planned Development Areas: General Design and Environmental Impact Standards, the Proposed Project must be arranged and designed in a way to assure that it does not cast shadows for more than two hours from 8:00 A.M. through 2:30 P.M., on any day from March 21, through October 21 in any calendar year, on any single Shadow Impact Area, depicted on Map 1A of the Code and Appendix D of Article 38, that either (a) is not cast in shadow during such period on such days by structures existing as of the effective date of Article 38; or (b) would not be cast in shadow during such period on such days by structures built to the as-of-right limits allowed by Article 38, whichever structures cast the greater shadow, provided that an area of the Boston Common not to exceed one acre may be shaded beyond the two-hour period, such area to be calculated as the sum of the areas shaded at the two-hour limit by the Proposed Project and all structures constructed after the effective date of this article exceeding the building sizes described in clauses (a) and (b), above. Any Proposed Project casting any net new shadow on the Boston Common by reason of its exceeding the building clauses (a) and (b), above, shall be required to mitigate the impact by contributing to turf, tree, statuary, park furniture, and path maintenance and capital improvements that are designed to promote the passive or active enjoyment of the Boston Common.

A shadow analysis is required for existing and build conditions for the hours 9:00 a.m., 12:00 noon, and 3:00 p.m. for the vernal equinox, summer solstice, autumnal equinox, and winter solstice. It should be noted that due to time differences (daylight savings vs. standard) the autumnal equinox shadows would not be the same as the vernal equinox shadows and therefore separate shadows studies are required for the vernal and autumnal equinoxes.

Shadow analyses are also required for 10:00 a.m., 11:00 a.m. 12:00 noon, 1:00 p.m., and 2:00 p.m., for October 21 and November 21.

The shadow impact analysis must include net new shadow as well as existing shadow and must clearly show the incremental impact of the proposed buildings. Shadows of surrounding buildings also must be included, as appropriate, to indicate clearly the new shadow impact of the project. The following proposed projects in the vicinity scheduled to be completed by 1995 must be included: 125 Summer Street, 40 Franklin Street, Kingston-Bedford, Commonwealth Center, Parkside East, West, and Mason, 90 Tremont Street, and 110-120 Tremont Street.

Particular attention must be given to existing or proposed public open spaces and major pedestrian areas including, but not limited to, the sidewalks surrounding the project site, the Downtown Crossing pedestrian zone, Boston Common, Filene's Park, open spaces and pedestrianways to be created as part of the Proposed Project, and the facades of historic buildings listed in Section V. Design or other mitigation measures to limit or minimize any adverse shadow impact must be identified and analyzed.

### Daylight

A daylight analysis for both build and no-build conditions must be conducted by measuring the percentage of skydome that is obstructed by the Proposed Project building. The analysis must include all streets surrounding the project site.

# 4. Air Quality

The DPIR must describe the existing air quality in the project vicinity and must evaluate ambient levels to determine conformance with the National Ambient Air Quality Standards of the U.S. Environmental Protection Agency.

A future air quality (carbon monoxide) analysis is required for any intersection where level of service is expected to deteriorate to D and the project causes a 10 percent increase in traffic or where the level of service is E or F and the project contributes to a reduction of LOS. The methodology and parameters of the traffic-related air quality analysis must be approved in advance by the . Massachusetts Department of Environmental Quality Engineering and the Boston Redevelopment Authority. Mitigation measures to eliminate or avoid any violation of air quality standards must be described.

In addition, a description of the garage exhaust system including location of exhaust vents and specifications, and an analysis of the impact on pedestrian level air quality from operation of the exhaust system are required. Measures

to avoid any violation of air quality standards must be described.

# 5. Solid and Hazardous Wastes

The presence of any contaminated soil or groundwater must be identified, and measures that will be employed to ensure their safe removal and disposal must be described. A copy of the Chapter 21E Site Investigation Report must be included in the DPIR.

The generation of solid wastes (construction period and operation of the project) and plans for removal and disposal must be described.

#### 6. Noise

An evaluation of ambient noise levels in the vicinity of the project site must be provided in the DPIR. Anticipated long-term noise increases from project-generated traffic and from the project's building mechanical equipment must be evaluated. Measures to minimize noise production and impact must be described.

## 7. Geotechnical Impact

An analysis of existing sub-soil and groundwater conditions, potential for ground movement and settlement during excavation, and potential impact on adjacent buildings, utility lines, and the Washington Street and Summer Street MBTA subway tunnels is required. This analysis also must include a description of the foundation construction methodology, the amount and method of excavation and disposal of the excavated material, and measures to prevent any adverse effects on adjacent building, utility lines, and subway tunnels.

The Proposed Project includes underground parking, in which case excavation below the existing watertable will be required. Therefore, an analysis is required of the impact of foundation construction on the maintenance of the groundwater levels and on foundation supports (e.g., wood piles) of adjacent structures. Measures to ensure that groundwater levels will not be lowered during or after construction must be described.

# 8. Construction Impacts

A construction impact analysis must be performed only for Option B at this time. The Applicant must indicate whether any substantially different construction impacts would



result under Option A. The implications of the project's phasing on construction related-impacts must be noted.

The construction impact analysis must include a description and evaluation of the following:

- a. potential dust and pollutant emissions and mitigation measures to control these emissions
- b. potential noise impact and mitigation measures to minimize increase in noise levels
- c. location of construction staging areas and construction worker parking
- d. construction schedule, including hours of construction activity
- e. access routes for construction trucks and anticipated volume of construction truck traffic
- f. method of demolition of the existing buildings on site, control of emissions, asbestos removal (if required), and disposal of the demolition waste, including identification of the disposal site
- g. measures to protect the public safety
- h. relationship of project construction to the construction of the Commonwealth Center and Kingston-Bedford projects, including evaluation of cumulative construction-related impacts and measures to avoid conflicts or other adverse impacts.

# 9. Rodent Control

An analysis of the impact of project construction on rodent populations and a description of the proposed rodent control program and compliance with applicable City and State regulatory requirements is required.

#### IV. URBAN DESIGN COMPONENT

# 1. Urban Design Objectives

The DPIR must address the urban design standards set forth in Section 8 of Article 31 of the Code, as well as the urban design objectives and specific design requirements for the Midtown Cultural District set forth in Article 38.

In accordance with Section 38-16.4 <u>Planned Development</u> Areas: <u>General Design and Environmental Impact Standards</u>, <u>Skyline Plan</u>, the Proposed Project must be generally consistent in height and form with the modified high spine/cluster skyline plan described in the text of the Midtown Cultural District Plan.

In accordance with Section 16.6 Planned Development Areas: General Design and Environmental Impact Standards, Enhancement of Pedestrian Environment, the Proposed Project must enhance the pedestrian environment, by means such as: (a) pedestrian pathways connecting to mass transit stations; (b) spaces accommodating pedestrian activities and public art; (c) materials, landscaping, public art, lighting, and furniture that enhance the pedestrian environment; (d) shopping or entertainment opportunities, including interior retail uses; (e) pedestrian systems that encourage more trips on foot; and (f) other attributes that improve the pedestrian environment and pedestrian access to mass transit (g) appropriate management and maintenance of stations; public space within the Proposed Project; and (h) preservation or recreation of the historic street pattern of the district through well defined, clearly delineated exterior or interior pedestrian passageways and through block corridors.

In accordance with Section 38-19 <u>Specific Design</u>
<u>Requirements</u>, the Proposed project must comply with the specific design requirements established in Article 38 for the following areas:

o Section 38-19.1 Street Wall Continuity
o Section 38-19.2 Street Wall Height
o Section 38-19.3 Display Window Area Regulations
o Section 38-19.4(a) Sky Plane Setbacks
o Section 38-19.4(b) Maximum Floorplates
o Section 38-19.4(c) Principal Facade
o Section 38-19.4(d) Corner Conditions for Corner Lot
Buildings

In addition, the following design objectives must also be addressed in the development and analysis of all options:

o Section 38-19.4(e) Minimum Tower Distances

a. The Proposed Project is located within or near four distinct districts: Downtown Crossing, the Cultural District, Chinatown, and the Financial District. Therefore the Proposed Project should be designed to respond to this context in terms of the view from surrounding streets, the positioning of entrances, and the siting of businesses and public spaces.



- b. City streets providing light, air, circulation, views, and vistas are the primary elements of the public realm in the downtown shopping district. The public is concerned about the transfer of streets to private interests for private use, and, in general, aims to reclaim previously existing streets for public Therefore, an analysis must be made of the effect of (1) retaining the Avenue de Lafayette corridor and its vista of the Opera House facade (2) reopening the Bedford-West Street corridor with its strong visual connection between the Kingston-Bedford development parcel and the Common, and (3) reopening the Harrison-Hawley Street corridor.
- c. The typical block pattern and parcel size in the Washington Street Commercial Palace District and in the Ladder Blocks give the area a familiar, intimate scale that is conducive to retail activity. The development concept should avoid the "megastructure" approach and instead enhance the district pattern with built elements similar in horizontal dimensions to existing buildings, and with streetwalls that do not exceed traditional block lengths without substantial openings for pedestrian streets and public spaces.
- d. The commercial strength of the district derives from the continuity of retail use at the streetfront and the high frequency of retail entries and display elements. Washington, Summer, and Chauncy Streets should have continuous retail use at street level with frequent entries, views of retail activity inside, and show windows.
- e. The successful blocks of retail activity downtown and in the Back Bay depend on street walls that not only provide continuity of use, but also a sense of containment that reinforces the character of the district and creates a well-defined place to shop. Accordingly, the proposed Midtown Cultural District Zoning requires continuity of the streetwall and limits the streetwall height to 90'. The Proposed Project must conform with this standard.
- f. Retailing needs the support of a comfortable environment to be successful. Projects on upper Washington Street dramatically underscore the negative effects of wind and sunlessness as compared with the more pleasant conditions at Downtown Crossing where the traditional building scale prevails. New shadow and wind at street level, particularly during the lunchtime shopping hours should be avoided, and ample ambient daylight should be preserved. These

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considerations are particularly important during the holiday shopping season. Information from the wind and shadow elements of the Environmental Component should be evaluated from the urban design perspective as well.

- g. As well as sometimes creating windy conditions on the street, tall buildings visually alter the character of the traditionally scaled streets that Bostonians associate with the retail core. Any building elements taller than 100-125 feet should be set back from Washington, Summer, and Chauncy Streets in accordance with the setback requirements set forth in Section 19-4 of proposed Article 38 for PDA-II; however, even greater setbacks of 50-60 feet are encouraged so that taller elements appear to be a block away from these streets.
- h. Attempts to create interior retail malls in competition with street-oriented retail activity have been unsuccessful in downtown Boston. In contrast to suburban malls where the individual identity of each shop overwhelms a comprehensive and integrated design image, any interior retail paths should emulate the easy flow of space and activity of the interiors of the Filene's and Jordan Marsh Department Stores and the main axis of Quincy Market, and not detract from Washington Street as downtown's main shopping street.
- 1. Building materials and design details are an important part of integrating new development with the fabric of the district. The architecture of the project should enhance the district with carefully designed ground floor and entry spaces, rooftops, vertical articulation of facades, window treatment, acknowledgment of neighboring cornice heights, and rich masonry detailing. Architecture, signage, and streetscaping should be consistent with guidelines being prepared for Downtown Crossing and the Cultural District.
- j. The Proposed Project should contribute substantially to providing needed cultural facilities and public spaces of the type and location which will reinforce the district as a whole as identified in the Midtown Cultural District Plan and its supplements.
- k. The type and location of day care facilities, locallyowned businesses, and neighborhood-oriented shops must be carefully planned. At least 4000 square feet of daycare space must be located on-site.

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#### 2. Urban Design Submission Materials

In order to determine that the Proposed Project is (a) architecturally compatible with surrounding structures; (b) exhibits an architectural concept that enhances the urban design features of the subdistrict in which it is located; (c) augments the quality of the pedestrian environment; and (d) is consistent with established design guidelines that exist for the area, the following schematic design items must be submitted:

- a. Written description of program elements and space allocation for each element
- b. Plan for the surrounding area and district and sections at an appropriate scale (1" = 50' or larger) showing relationships of the Proposed Project to the surrounding area's and district's:
  - o Massing
  - o Building height
  - o Scaling elements
  - o Public spaces
  - o Pedestrian and vehicular circulation
- c. Black and white 8"x10" photographs of the site and neighbor-hood
- d. Sketches and diagrams to clarify design issues and massing options
- e. Eye-level perspective(s) (reproducible line drawings) showing the proposal in the context of the surrounding area
- f. Aerial views of the project
- g. Site sections at 1" = 20' or larger showing relationships to adjacent buildings and spaces
- h. Site plan at an appropriate scale (1" = 20' or larger) showing:
  - General relationships of proposed and existing adjacent buildings and open space
  - Open spaces defined by buildings on adjacent parcels and across streets

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- o General location of pedestrianways, driveways, parking, service areas, streets, and major landscape features
- o Pedestrian, handicapped, vehicular and service access and flow through the parcel and to adjacent areas
- o Survey information, such as existing elevations, bench-marks, and utilities
- o Phasing possibilities
- o Construction limits
- i. Massing model at 1" = 40' for use in the BRA's downtown base model and a study model at 1" = 16' showing facade design
- j. Drawings at an appropriate scale (1" = 8'or larger) describing architectural massing, facade design and proposed materials including:
  - o Site improvement plans
  - o Elevations in the context of the surrounding area
  - Sections showing organization of functions and spaces
  - o Preliminary floor plans showing ground floor, typical upper floor(s), and roof
- k. Proposed schedule for submittal of design development materials

Submission materials for Design Development and Contract Documents submissions can be found in Appendix 3.

#### V. HISTORIC RESOURCES COMPONENT

In accordance with Section 38-16 <u>Planned Development Areas:</u> <u>General Design & Environmental Impact Standards; Landmarks and Historic Buildings</u>, the Proposed Project must be generally designed and arranged in such a way as to limit the reduction of light and air surrounding Landmarks and Historic Buildings listed on the Massachusetts Register of Historic Places, and to minimize the shadow impact on their facades.

An historic resources analysis must be performed for both options. However, where project impacts would be identical,



only one submission need be made. The analysis must assess the impacts of height, scale, massing, and any relevant environmental impacts on historic districts and buildings. These impacts include:

- (a) the isolation or alteration of a building identified in paragraph 2 of this component, or a building in a district identified in paragraph 1 of this component, from its surrounding environment; or
- (b) the introduction of visual, audible or atmospheric elements that are out of character with the districts and buildings identified in paragraphs 1 and 2 of this component.
- 1. Effects of the Proposed Project on National or Massachusetts Register or Register-eligible sites or districts and other architecturally and historically significant areas including:
  - o the Washington Street Theatre District
  - o the West Street District
  - o the Pre-fire Commercial District (also known as the Ladder Blocks District)
  - o the Commercial Palace District
  - o the Temple Place District
  - o the Essex/Textile District
- 2. Impact of the Proposed Project on the following buildings rated I, II, or III by the Boston Landmarks Commission in proximity to the site.

Proctor Building 100-106 Bedford Street 65-71 Franklin Street 77-83 Franklin Street Columbia Nat'l Life Ins. Bldg. 85-87 Franklin Street 40-46 Summer Street Long's Building 83-87 Summer Street 89-91, 93-95 Summer St. 32 Temple Place Provident Building 29-35 Temple Place 37-43 Temple Place 48-50 Temple Place St. Paul's Cathedral 136 Tremont R.H. Stearns Building 140 Tremont Street Lawrence/O. Ditson Bldg. 150 Tremont Street 174-175 Tremont Street Evans House 178-179 Tremont Street Oliver Ditson Building 384-426 Washington St. Filene's 431-439 Washington St. Gilchrist Building 443-447 Washington St. Winter Street Bldg.

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485-499 Washington St. Blake Building 511-513 Washington St. 523-527 Washington St. Modern Theatre 543-547 Washington St. Adams/Bijou Theatre Paramount Theatre 549-563 Washington St. 590-622 Washington St. Washington/Essex Bldg. 605-611 Washington St. H. Miller Piano Fact. Bldg. 13-15 West Street Stowell's 20-42 Winter Street

3. The potential for the existence of any archaeological resources at the project site must be reported in the DPIR. The archaeological investigation must be undertaken in accordance with the requirements of the City Archaeologist.

## VI. INFRASTRUCTURE SYSTEMS COMPONENT

The Infrastructure Systems Component of the DPIR must address anticipated volume requirements and generation for water, sewage, storm drainage, electricity/energy, telephone, gas, steam, cable/computer or other special systems. It must include an evaluation of the Proposed Project's impact on the capacity and adequacy of these systems, and the need reasonably attributable to the Proposed Project for additional systems facilities.

If any storm drainage is handled by a combined sewage line, then any circumstances which might result in backflow or capacity problems in such combined sewage lines must be described and mitigated. For example, peak sewage generation during a high drainage runoff situation, such as a hurricane or severe thunderstorm, must be studied.

Measures to conserve resources including any provisions for recycling, energy conservation (including the utilization of solar energy control systems), and water conservation must be identified.

Any system upgrading or connection which (1) requires a significant public or utility investment, (2) creates a significant disruption in vehicular or pedestrian circulation, or (3) affects any public or neighborhood park or streetscape improvement, comprises an impact which must be mitigated. The Applicant must demonstrate anticipated impacts in this regard, including mitigation measures, and must include in the analysis all proposed projects in the Midtown Cultural District for which a PNF has been submitted as of the date of this Scoping Determination.

Because Avenue de Lafayette is proposed to be built upon, special attention must be paid to relocation of all



utilities currently in that street, or special provisions for protection and access to allow utilities to run through the project site, and a description of the project impacts on site storm drainage and water quality is required. Any interruptions in service or new risks associated with utility lines which run through the site area must be described.

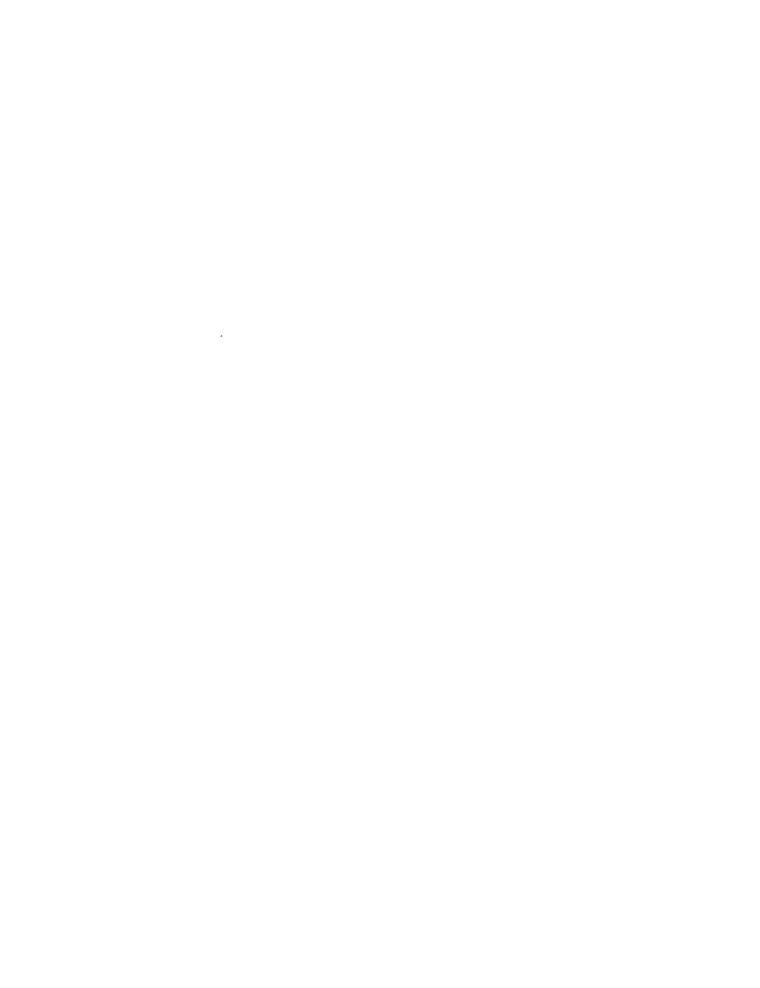
The Proposed Project must address potential impacts on and connections to existing and proposed Orange and Green line MBTA facilities.

The location of transformer and other vaults required for electrical distribution must be chosen to minimize disruption to pedestrian paths and improvements both when operating normally and when being serviced. Thorough consultation with the planners and engineers of the utilities is required, and must be referenced in the DPIR. A presentation of the Proposed Project, with special focus on infrastructure issues, before the Transportation Liaison Committee is required.

### VII. AGREEMENTS

The following must be provided in form and content satisfactory to the appropriate signatory public agencies before the Proposed Project can receive final approval. They are not required for the DPIR.

- 1. If applicable, Cooperation Agreement, pursuant to Section 31-14 of the Code, to provide for monitoring of continued compliance with the Final Project Impact Report, including, but not limited to, a Transportation Access Plan Agreement and Construction Management Plan Agreement.
- 2. Development Impact Project Agreement pursuant to Articles 26A and 26B of the Code
- 3. Any applicable agreements relating to Chapter 121A, Urban Renewal, air rights, or ground leases
- 4. Boston Residents Construction Employment Plan, pursuant to Chapter 12 of the Ordinances of 1986 of the City of Boston, as amended by Chapter 17 of said Ordinances, and Executive Order Extending Boston Residents Job Policy, signed by the Mayor on July 12, 1985
- 5. If applicable, any amendments to existing 121A Agreements or Land Disposition Agreements



#### APPENDICES

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# REQUIRED FINANCIAL INFORMATION

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<u>DEVELOPMENT PROFORMA</u> includes all the information normally found in a development proforma, by phase. This includes, but is not limited to:

Land acquisition costs, per land square foot and total, by parcel. Include distinctions between attributed value and actual out-of-pocket costs, if any. Also include any imputed or actual carrying costs.

Attribution of acquisition expense over project components. (per FAR square foot residential, office, parking, etc.)

All hard costs on a per-unit and total basis, by phase. (disaggregated into base building, tenant improvement work, rehabilitiation work, residential finishes, garage cost, site work, furniture, fixtures and equipment, etc.)

All soft costs on a per-unit and total basis, by phase. (disaggregated into individual line items such as architectural, engineering, legal, accounting and developer's fees and any other professional fees, insurance, permits, real estate tax during construction, etc.)

All contingencies on a per-unit and total basis, by phase (specify whether contingency is on hard cost, soft cost, or total cost).

All assumptions regarding financing terms on acquisition, predevelopment, and construction loans, by phase (including financing fees, interest rates, terms, drawdown assumptions, terms, participations, amortization).

Calculation of housing and jobs linkage obligation in accordance with Articles 26A and B, and anticipated payment method (over term of obligation or on a net present value basis).

Any other project-related expenses not within any of the above categories.

Calculation of total development cost by component, including total and per unit breakdown (e.g. per square foot office, residential, retail, etc., per parking space, etc.)

Sources of debt and equity for total project costs.

Appropriate return measures (return on equity, return on total development cost, internal rate of return; specify method of calculation and hurdle rates).



10-YEAR OPERATING PROFORMA includes all the information normally found in an operating proforma, on a yearly basis. This includes, but is not limited to:

Tabulation of gross and net (leasable) square feet for all commercial space.

Schedule of all rents whether base or percentage rents on a per square foot and total basis (including anticipated garage rates and occupancy).

Anticipated operating expenses and real estate taxes on per square foot and total basis, and clear explanation of division of expenses between owner and tenant (includes all commercial space, hotel, and garage)

All other expense and vacancy assumptions set forth to calculate cash available for debt service.

Anticipated leasing patterns (5-yr, 10-yr, etc.), lease-up rates and calculation of operating deficits if any.

Tenant inducements including free rent, tenant improvement allowances, etc.

Calculation of debt service, before tax cash flow, debt coverage ratios.



# PEDESTRIAN SAFETY/COMFORT WIND STANDARDS



#### PEDESTRIAN SAFETY/COMFORT WIND STANDARDS

Activity Area	Effective Gust Velocity	Permitted Occurrence Frequency
Limit for All Pedestrian Areas	13.8 m/sec (31 mph)	1.0%
Major Walkways Especially Principal Egress Paths for High-Rise Buildings	13.8 m/sec (31 mph)	1.0%
Other Pedestrian Walkways Including Street and Arcade Shopping Areas	11.2 m/sec (25 mph)	5.0%
Open Plazas & Park Areas Walking, Strolling Activities	6.3 m/sec (14.1 mph)	15.0%
Open Plaza & Park Areas Area, Open-Air Restaurants	4.0 m/sec (9 mph)	20.0%

For the purposes of the above standards, "effective gust velocity" is defined as meaning hourly wind speeds + 1.5 root-mean-square of the fluctuating velocity component measured at the same locations over the same time interval.

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# SUBMISSION REQUIREMENTS FOR DESIGN DEVELOPMENT AND CONTRACT DOCUMENTS SUBMISSIONS



Phase II Submission: Design Development

- 1. Revised written description of project
- 2. Revised site sections
- 3. Revised site plan showing:
  - a. Relationship of the proposed building and open space to existing adjacent buildings, open spaces, streets, and buildings and open spaces across streets
  - b. Proposed site improvements and amenities including paving, landscaping, lighting and street furniture
  - c. Building and site dimensions, including setbacks and other dimensions subject to zoning requirements
  - d. Any site improvements or areas proposed to be developed by some other party (including identification of responsible party)
  - e. Proposed site grading, including typical existing and proposed grades at parcel lines
  - 4. Dimensioned drawings at an appropriate scale (e.g., 1" = 8') developed from approved schematic design drawings which reflect the impact of proposed structural and mechanical systems on the appearance of exterior facades, interior public spaces, and roofscape including:
    - a. Building plans
    - b. Preliminary structural drawings
    - c. Preliminary mechanical drawings
    - d. Sections
    - e. Elevations showing the project in the context of the surrounding area as required by the Authority to illustrate relationships or character, scale and materials
- 5. Large-scale (e.g., 3/4" = 1'-0") typical exterior wall sections, elevations and details sufficient to describe specific architectural components and methods of their assembly

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- Outline specifications of all materials for site improvements, exterior facades, roofscape, and interior public spaces
- 7. Eye-level perspective drawings showing the project in the context of the surrounding area
- 8. Samples of all proposed exterior materials
- Complete photo documentation 935 mm color slides) of above components including major changes form initial submission to project approval

#### Phase III Submission: Contract Document

- 1. Final written description of project
- 2. A site plan showing all site development and landscape details for lighting, paving, planting, street furniture, utilities, grading, drainage, access, service, and parking
- Complete architectural and engineering drawings and specifications
- 4. Full-size assemblies (at the project site) of exterior materials and details of construction
- 5. Eye-level perspective drawings or presentation model that accurately represents the project, and a rendered site plan showing all adjacent existing and proposed structures, streets and site improvements
- 6. Site and building plan at 1" = 100' for Authority's use in updating its 1" = 100' photogrammetric map sheets

#### Phase IV Submission: Construction Inspection

- All contract addenda, proposed change orders, and other modifications and revisions of approved contract documents which affect site improvements, exterior facades, roofscape, and interior public spaces shall be submitted to the Authority prior to taking effect.
- 2. Shop drawings of architectural components which differ from or were not fully described in contract documents

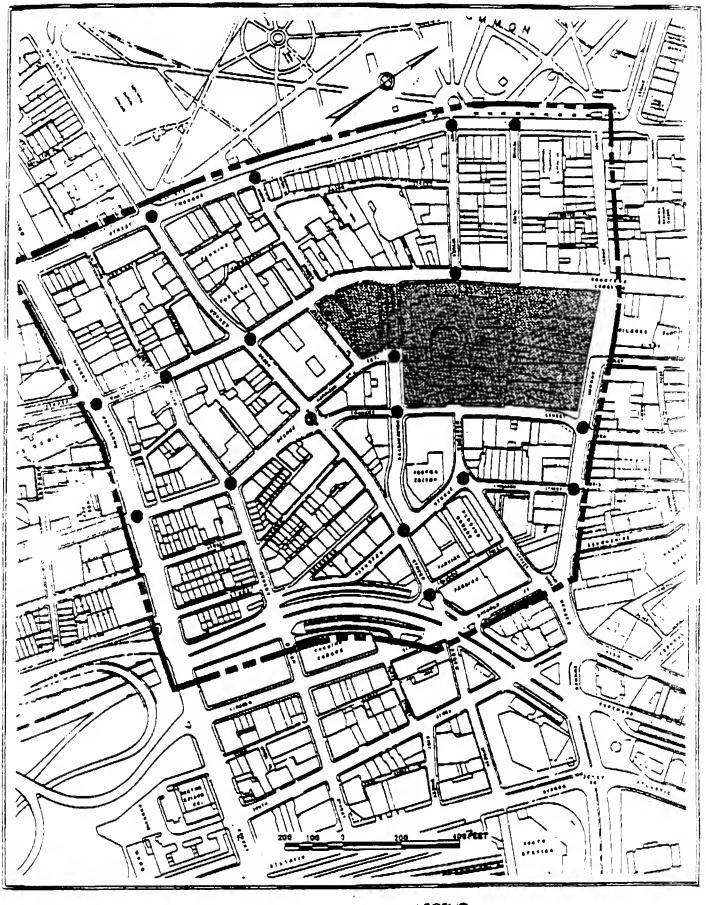
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TRANSPORTATION IMPACT AREA AND INTERSECTIONS TO BE ANALYZED

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## LEGEND:

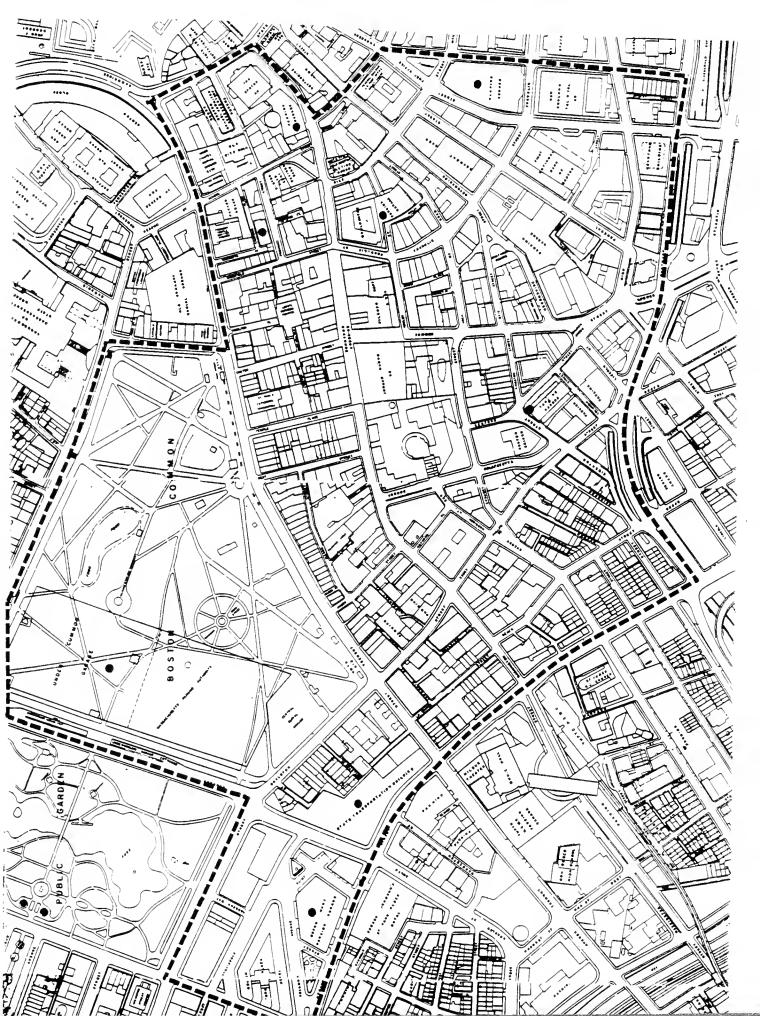
Transportation Impact Arca

Project Location



### PARKING STUDY AREA

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BOSTON TRANSPORTATION DEPARTMENT CONSTRUCTION MANAGEMENT PROGRAM

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# CONSTRUCTION MANAGEMENT PROGRAM

## December 1986



City of Boston

BOSTON TRANSPORTATION DEPARTMENT in cooperation with INSPECTIONAL SERVICES DEPARTMENT POLICE DEPARTMENT, and PUBLIC WORKS DEPARTMENT.

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# CITY OF BOSTON CONSTRUCTION MANAGEMENT PROGRAM

#### INTRODUCTION

The City of Boston is the financial, commercial and cultural center of New England and possesses one of the healthiest economies in the country. One indication of this is the significant number of new development projects — both office and housing — occurring on Boston's downtown and neighborhood streets. In the past three years alone, more than six million square feet of new office space and 3,400 housing units have been developed in the City. Another five million square feet of office space is planned between now and 1989.

Boston's economic growth has and will continue to have a very positive effect upon employment, housing, public and private investment, and tourism. This growth, however, is also having an effect upon the quality of life for its residents and the more than one million people who travel into or through Boston each day.

Increased traffic volumes on roadways already utilized beyond their capacity, coupled with congestion caused by construction-related activities, has resulted in a situation where Boston's roadway system is unable to sustain the economic growth which the City is experiencing.

The Transportation Department has recognized that the City must take an active and aggressive role in managing and directing the activities that occur on Boston's streets. To that end, the Department, in cooperation with the Inspectional Services Department, the Public Works Department and the Boston Police Department, has established the CONSTRUCTION MANAGEMENT PROGRAM. This program establishes clear policies, guidelines and procedures to govern all construction-related use of the City's public roadways. The intent is to control and minimize the negative traffic impacts and public safety hazards resulting from construction.

#### CONSTRUCTION MANAGEMENT

Boston's unique charm and vitality has attracted an extraordinary level of interest in its redevelopment. The visible products of this redevelopment include new downtown office buildings, restored landmarks, road reconstruction, new housing and the rebirth of the waterfront.

The significant increase in the number of development projects is illustrated by the fact that more than 3,000 permits have been issued since July for projects within the 2.3-square-mile area of Downtown Boston. That means that in addition to the normal use generated by residents, commuters, businesses and tourists. Boston's streets are further taxed by construction activities such as truck deliveries, cranes, lane closures, dumpsters and construction workers commuting to and from each site.

The Department has reexamined the process by which Boston's streets and sidewalks are used by developers and contractors and determined that a creative and highly coordinated approach to managing con-

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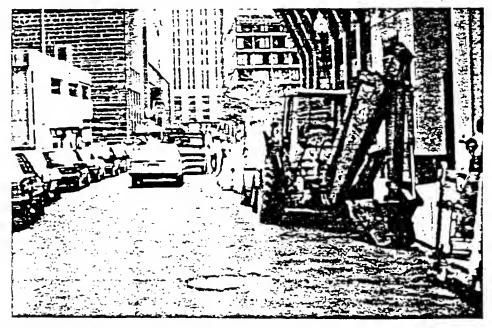
struction activities is essential. Through the aggressive implementation of the Construction Management Program, the City can sustain the current economic growth while ensuring that its streets are not strangled by it.



Prior to implementation of the program, developers routinely parked construction vehicles along the roadway, resulting in unnecessary lane closure and a hazardous situation for pedestrians.

#### PURPOSE OF THE PROGRAM

The magnitude and scope of current development necessitates a comprehensive plan to manage both the day-to-day impacts created by construction and the long-term impacts resulting from the addition of a new office, apartment or commercial building. After the cranes and jersey barriers are removed, the completed building will house employees or residents and will attract many others whose need to travel to and from the site will impact the surrounding transportation network.



Federal Street is narrowed to one lane due to construction equipment and cars queuing to enter the Winthrop Square parking garage.



In the decade from 1968 to 1977, 45,000 permits were issued for construction and reconstruction projects. In the last six years alone more than 53,000 permits for buildings and major reconstruction projects have been issued. Virtually every construction project entails some occupation of the public way — for a dumpster, a lane closure or the delivery of materials — thereby contributing to traffic congestion and the reduction of parking resources. When a roadway is operating at capacity the loss of even a single lane causes traffic congestion.

In addition to the multitude of private construction projects, the City is also embarking upon a major reinvestment in its infrastructure. Last year the City introduced a plan to upgrade and restore municipal buildings, roadways, bridges and parks. In the next few years, Boston's Public Works Department will be repaying or reconstructing about 15 miles of city streets. Eight bridges are under design, three of which are slated to be reconstructed or replaced. The Boston Water and Sewer Commission has embarked on an ambitious 15-year plan to clean, replace or reline 25 to 30 miles of water mains, storm drains, and sewers, annu-

Before



After



 $Photos\ illustrate\ roadway\ usage\ before\ and\ after\ establishment\ of\ the\ Construction\ Management\ Program.$ 

ally. While these projects will ultimately enhance our quality of life, they will also further disrupt the flow of vehicle and pedestrian traffic throughout the City.

The Construction Management Program will address two primary needs. First, is the the need to control the day-to-day activities at construction sites to minimize negative traffic and public safety impacts. Second, is the need to coordinate and manage future construction projects occurring in and around a given area in the City to ensure that the level of activity does not exceed the area's ability to sustain the growth.

### PRIOR PRACTICES

An analysis of the street occupancy permitting system by the Transportation Department illustrated that the procedures and controls of past decades were inadequate to meet the challenges confronting Boston today.

Under the previous system, a contractor would seek a street occupancy permit from the Transportation Department after all negotiations, agreements, design work, contracts and building permits had already been finalized internally, as well as with the BRA and the Inspectional Services Department.

That structure resulted in a situation where traffic impacts were not identified until very late in the development process. By the time a street occupancy permit was sought the developer and contractor had already invested considerable time and money into the design of their project. By then it was often too late to incorporate traffic mitigation measures into the development plans.

For example, several years ago, developers of a major downtown hotel, who had already completed their design and site work, applied for a street occupancy permit. Upon analyzing the project proposal, the Transportation Department determined that a different location for the garage entrance would reduce the negative impact on traffic in the area. This was discovered so far into the process, however, that obtaining the desired changes in design was impossible.

### **NEW PROCEDURES**

Under the Construction Management Program, not only are the traffic impacts identified early in the process, the proposals are evaluated in the context of other projects in the vicinity. Strict guidelines are placed on the times and types of activities which are allowed to occur. These new procedures have already resulted in TRAFFIC MAINTENANCE PLANS that have allowed major developments to proceed in problematic areas with minimal disruption to the surrounding transportation network.

For example, the Beacon Companies, as developer and Turner Construction Company, as prime contractor, are erecting a 31-story commercial structure at 75 State Street. Following past practice, they approached the Inspectional Services Department for review and approval of necessary demolition, foundation and building permits. Instead they were brought into a broader dialogue that included the Transportation Department. Their proposed construction methods would have necessitated the occupancy of State Street reducing it to 18 feet (two narrow travel lanes, eliminating all loading or drop off capacity for businesses along the north side of the street), and the closing of Kilby Street — both for a minimum of eighteen months (See figure I). Early review of their proposals enabled the Construction Management staff to work closely with Beacon Companies and Turner Construction to make appropriate design changes so that the street occupancy could be minimized during each phase of construction.

As illustrated in Figure II, the resulting plan maintains a minimum of 26 feet of State Street for travel and loading functions for the first five months and 28 to 30 feet for the remainder of the project. One lane of Kilby Street will remain open at all times. In addition, the plan also incorporates a wide variety of other mitigation measures including specified routes and schedules for trucks traveling to and from the site and the designation, by the prime contractor, of a traffic supervisor. This Traffic Maintenance Plan, already in effect, has enabled this major project to proceed with minimal disruption to the surrounding area.

### MANAGEMENT

A Construction Management Team, comprised of representatives from the Boston Police Department, Inspectional Services Department and the Public Works Department, has been established within the Transportation Department. In addition, the unit will include a police sergeant, a chief inspector, an inspector,



and an administrative secretary responsible for the day-to-day implementation of the program. This management team will ensure that the appropriate city agencies are involved in the establishment of guidelines, the issuance of permits and the monitoring of compliance for the duration of all construction projects on Boston's streets.

The four departments, Transportation, Inspectional Services, Public Works and the Police Department, each have the following primary responsibilities.

The Transportation Department is charged with:

- 1. Evaluating the potential traffic and parking impacts of any ongoing or proposed construction project, including the demolition of any existing structures;
- 2. Developing a plan to hold these impacts to an absolute minimum:

3. Monitoring and ensuring compliance with that plan.

The Inspectional Services Department is charged with:

- 1. Evaluating the design and construction methodology of a proposed project for code compliance:
- 2. Issuing building permits after all construction and transportation criteria have been satisfied.

The Public Works Department is charged with:

- 1. Evaluating the potential infrastructure impacts of any ongoing or proposed construction project:
- 2. Developing plans to minimize negative impacts as well as plans to restore the impacted area:
- 3. Issuing street occupancy permits after all building, transportation, and infrastructure concerns have been satisfied.

The Police Department is charged with:

- 1. Maintaining public safety and the free flow of vehicular and pedestrian traffic through the impacted area;
- 2. Ensuring the contractor's compliance with the conditions of street occupancy permits as determined by the Public Works and Transportation Departments.

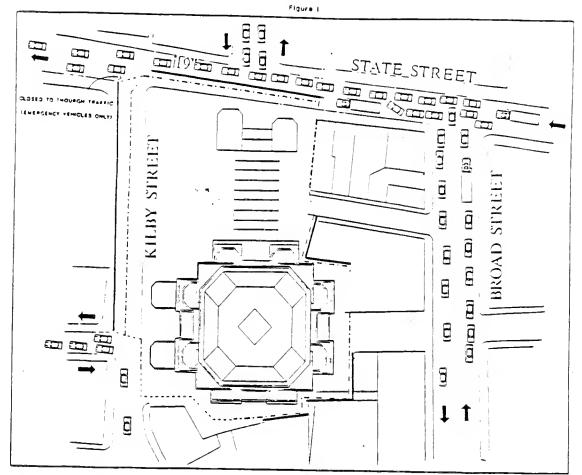
### PROGRAM PROCEDURES

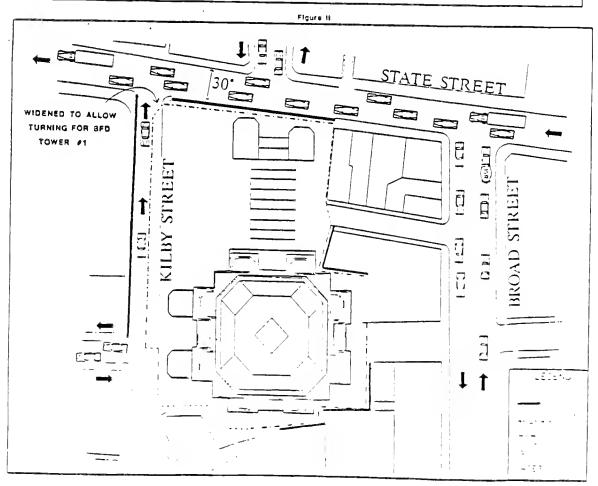
The Construction Management staff will review all applications for street occupancy permits. The following procedures have been established to ensure effective control and management of construction activities.

- I. FOR ALL ACTIVITIES REQUIRING A STREET OCCUPANCY PERMIT THE FOLLOWING PROCEDURES ARE NECESSARY:
  - A. Initial application is made at the Transportation Department, Traffic Management Division, Room 721, City Hall. Upon completion of a TRAFFIC MAINTENANCE APPROVAL FORM, application is made to the Public Works Department for a Street Occupancy Permit both must be displayed and available at all times at the worksite.
  - B. Application must be made sufficiently in advance of the planned sidewalk or street occupancy to enable a thorough review by each department. For small-scale projects which will create minimal impact on vehicular or pedestrian traffic, a permit may be issued within a day. For major building projects the review period may take several weeks.
  - C. The need for occupancy of any portion of the public way must be documented along with all justification as to why the project cannot be completed within its boundaries.
  - D. The number of feet and the duration of sidewalk or street occupancy must be kept to an absolute minimum for each phase of the project. The duration of each phase of occupancy must be fully documented.
  - E. A description of how and where all construction-related vehicles, equipment, and materials (including those belonging to employees, subcontractors, etc.) will be parked or stored during all phases of the project. Parking or storage on the public way will be consistently and regorously prohibited unless the applicant has demonstrated, and the City concurs, that such occupancy is absolutely necessary and can be accommodated without undue disruption to the public.
- II. THE FOLLOWING REQUIREMENTS APPLY TO PROJECTS WITHIN DOWNTOWN BOSTON. WHICH WILL OCCUPY THE PUBLIC WAY FOR MORE THAN A TWENTY-FOUR-HOUR PERIOD Including sidewalks within Downtown Boston or other streets, as determined by the Transportation Department:

<sup>\*</sup>Downtown Boston is defined as the area north of Massachusetts Avenue as bounded by the Charles River, Boston Harbor, Fort Point Channel, and the S. E. Expressway.







- A. Applicants for all building permits must first work with the Transportation Department to complete a TRAFFIC MAINTENANCE APPROVAL FORM. No permits will be issued until all building and transportation requirements have been met.
- B. Applicants must provide a scaled drawing (to the scale of 1" = 20") for each phase of the project, indicating roadway or sidewalk constraints. Depending upon the location, size and duration of occupancy, the drawing should also indicate any temporary signing, roadway marking, location of anticipated police details or any other actions to be taken by the contractor to reduce the adverse impacts of the project.
- III. FOR ALL MAJOR PROJECTS (greater than 30,000 square feet or in excess of 25 units) that require street occupancy. A COMPLETE TRAFFIC MAINTENANCE PLAN MUST BE COMPLETED AND APPROVED BEFORE ANY PERMITS WILL BE ISSUED. Depending upon the location, size and duration of street occupancy, one or more pre-construction meetings with Construction Management staff may be necessary.

The Traffic Maintenance Plan requires written descriptions and documentation relative to the previously listed criteria, as well as the following items:

- 1. A scaled drawing (to the scale of 1" = 100') showing a radius of at least 500 feet from the construction site including all roadways, street directions, other existing construction sites within this perimeter, and an indication of any and all impacts that may occur as a result of multiple projects within the impacted area.
- 2. Relative to the method of construction, applicants must indicate that all methods have been explored and that the proposed method has been determined to be the most feasible with the least negative impact on traffic and public safety (e.g. utilization of a climbing crane rather than a truck crane). Cost cannot be the sole determining factor in responding to these criteria. It is recommended that the Construction Management staff be contacted with initial proposals before extensive design work has progressed.
- 3. A description and schedule of delivery procedures and specific truck routes for access to and from the project site. Consideration must be given to time periods that are not in conflict with peak traffic periods (e.g., between 7:00 p.m. and 7:00 a.m.).
- 4. A proposal for a street cleaning program for those streets affected by construction activities and accompanying construction-related vehicles.
- 5. A summary of the impacts of the street occupancy on adjacent businesses and residents accompanied by responses from establishment owners.

### IV. MONITORING AND COMPLIANCE COMPONENTS:

- Coordination of the Construction Management Program will be provided by the Transportation Department. A sergeant from the Boston Police Department has been assigned to the department to ensure compliance with all conditions of each street occupancy permit.
- Paid police details are required by the city to ensure public safety, the free flow of vehicular and pedestrian traffic, and compliance with all city-mandated conditions of street occupancy. All Boston Police officers will receive general instructions regarding their responsibilities while on a paid detail at a construction site. This information (provided in Attachment C of this package) will also be incorporated in the police academy's training program.
- A copy of the Transportation Department's TRAFFIC MAINTENANCE APPROVAL FORM will
  be provided to each and every detail officer by the holder of that permit. (A copy of the TRXFFIC
  MAINTENANCE APPROVAL FORM is included in Attachment D of this package.)
- Any project found to be in non-compliance with its permit conditions will be subject to immediate
  corrective action which may include the revocation of one or more of the activities allowed under
  the terms of the permit.

The different criteria addressed in I — III above constitute the starting point for an application. The Construction Management staff may require additional information or actions based upon specific characteristics of each project.

<sup>\*</sup>The Department of Inspectional Services (ISD) will issue a short form permit for those projects that do not require street occupancy



### GENERAL CRITERIA FOR STREET OCCUPANCY APPLICATIONS

This information applies to all individuals, developers, and general contractors performing any construction that requires occupancy of a public way (including sidewalks) within Downtown Boston (and certain other streets or parts thereof as determined by the Transportation Department) for more than a twenty-four-hour period. Applicants for a Street Occupancy Permit must be prepared to provide very specific plans relative to the following items:

1. Initial application for a TRAFFIC MAINTENANCE APPROVAL FORM is made at:

The Boston Transportation Department,

Traffic Management Division, Room 721

City Hall, Boston MA 02201

Application is then made to the Public Works Department for a Street Occupancy Permit. No permits will be issued until all building and transportation requirements have been met. All permits must be displayed and available at all times at the worksite.

- 2. Application must be made sufficiently in advance of the planned sidewalk or street occupancy to enable a thorough review by each department. For small-scale projects which will create minimal impact on vehicular or pedestrian traffic, a permit may be issued within a day. For major building projects the review period may take several weeks.
- 3. The need for occupancy of any portion of the public way must be documented along with all justifications as to why the project cannot be completed within its boundaries.
- 4. The number of feet and the duration of the sidewalk or street to be occupied must be kept to an absolute minimum for each phase of the project. The duration of each phase of occupancy must be fully documented.
- 5. A description of how and where all construction-related vehicles, equipment, and materials (including those belonging to employees, subcontractors, etc.) will be parked or stored during all phases of the project. Parking or storage on the public way will be consistently and rigorously prohibited unless the applicant has demonstrated, and the city concurs, that such occupancy is absolutely necessary and can be accommodated without undue disruption to the public.
- 6. Applicants must provide a scaled drawing (to the scale of 1" = 20') for each phase of the project, indicating roadway or sidewalk constraints. Depending upon the location, size and duration of occupancy, the drawing should also indicate any temporary signing, roadway marking, location of anticipated police details or any other actions to be taken by the contractor to reduce the adverse impacts of the project.

# TRAFFIC MAINTENANCE PLAN CRITERIA

FOR ALL MAJOR PROJECTS (greater than 30,000 square feet or in excess of 25 units) that entail street occupancy\*, A COMPLETE TRAFFIC MAINTENANCE PLAN MUST BE COMPLETED AND APPROVED BEFORE ANY PERMITS WILL BE ISSUED. This plan will be used by the city to monitor the construction activities throughout the course of the project. This plan will become a part of the building permit. The required information and details for this submittal are outlined below. Any deviation from required items must be fully documented.

- A. General Information Traffic Maintenance Plan shall include but not be limited to the following:
  - 1. A description of the project, its location and other pertinent background information.
  - 2. The name and title of person responsible for all matters pertaining to the terms of the permit. The general contractor shall be fully accountable for all contractors and subcontractors, including all project-related utility companies.
  - 3. The name of the designated traffic coordinator responsible for scheduling deliveries, spotting trucks and other construction-related vehicles and equipment within the site, eliminating queuing on public streets, ensuring that streets are kept clean, etc.

<sup>\*</sup>The Inspectional Services Department (ISD) will issue a short form permit for those projects that do not require street occupancy



- 4. Relative to the method of construction, applicants must indicate that all methods have been explored and that the proposed method has been determined to be the most feasible with the least negative impact on traffic and public safety (e.g., utilization of a climbing crane rather than a truck crane). Cost cannot be the sole determining factor in responding to this criteria. It is recommended that the Construction Management staff be contacted with initial proposals before extensive design work has progressed.
- B. Site Plan A detailed site plan or series of plans, shall include but not be limited to the following items:
  - 1. A site plan drawing at a scale of 1'' = 20' for each phase of the project, including any demolition of existing structure.
  - 2. A list of all abutting streets.
  - 3. Dimensions of all streets, sidewalks, alleys and easements abutting or affecting the site.
  - 4. Exact location and dimensions of street occupancy required at any time during the life of the construction work, including duration of occupancy by work phase.
  - 5. Location and description of signage for pedestrians, vehicle movements and prohibitions, and any other necessary signage. Said signage shall be installed in accordance with the locations and intervals determined by the Boston Transportation Department and shall be maintained by the general contractor for the duration of each phase of the construction project.
  - 6. Location of cranes, hoists and other major construction equipment, and location of trucks during loading and unloading operations.
  - 7. Location and schedule of utility cuts and connection work, and any other site work that requires use of the public way.
- C. Area Plan A large-scale plan (to the scale of 1'' = 100') of the area in which the project is located that indicates the following:
  - 1. Street system serving the vicinity of the project for a distance of 500 feet (minimum) in all directions.
  - 2. Routes to be used by trucks to reach site.
  - 3. Existing construction projects which may affect or be affected by traffic related to this project.
  - 4. Location of remote staging area(s) related to this project and its subcontractors.
- D. Special Conditions Detailed documentation regarding special or unique items relating to construction activities which require use of the public way, including the following:
  - 1. Police details Describe location, time, assignments, and other proposed uses.
  - 2. Snow removal Describe steps to be taken to assure that clear dimensions will be maintained and any other special measures to be taken.
  - 3. Street cleaning Describe steps to be taken to provide street cleaning as necessary to maintain streets over which this project's construction vehicles travel, to the level of cleanliness as normally provided by the city.
  - 4. Pedestrian Describe measures to be taken to provide for the comfort and convenience of pedestrians adjacent to the site: if necessary to provide covered walkways, describe inside clear dimensions (desirable, 8'0" wide and 7'0" high), suitable lighting, and other special measures to encourage pedestrian use.
  - 5. Delivery schedules Describe truck delivery schedules or how the schedules will be handled, with breakdowns relating to structural steel, facing panels, concrete, excavation, etc. Special attention should be made to ensure that deliveries are not scheduled between the hours of 7 a.m. to 9:30 a.m. and 4 p.m. to 6 p.m. and that the preferred time frame for all deliveries is 7 p.m. to 7 a.m.
  - 6. Public Safety Fire lanes and appropriate signs shall be established through and around the site on a priority basis. Actual determination of actual limits necessary may be done through field trials at which both the Fire Department and Transportation Department will be present.
  - 7. Employee Parking Reasonable efforts shall be taken to eliminate the parking of vehicles of

- the construction workers at the construction site, where site constraints dictate, and on the public street in the vicinity of the construction project. The general contractor shall consider arranging for off-site, remote parking areas with shuttle buses to the site, ride sharing, M.B.T.A. pass subsidies, etc., and these efforts must be documented.
- 8. A summary of the impacts of the street occupancy on adjacent businesses and residents accompanied by responses from establishment owners.
- E. Street Occupancy Approval If approval is granted, the street occupancy shall be for construction-related activities ONLY. No private vehicles will be permitted. No additional occupancy will be granted outside or in addition to the initial approvals.

### RESPONSIBILITY OF POLICE DETAILS AT CONSTRUCTION SITE

The purpose of having a police detail at a construction site is to assist the general public, both pedestrian and motorist, past the construction area or through a congested intersection caused by the related construction activities. Any assistance given to the contractor, such as positioning equipment, should never occur at the expense or inconvenience of the general public and no actions, by the contractor, in violation of their street occupancy permit can be allowed. The following procedures and guidelines shall be followed:

- 1. The officer(s) should report to the contractor's superintendent and acquaint himself with the project's "Street Occupancy Permit Compliance Forms" which are supplied and approved by the Boston Transportation Department. These forms detail the following requirements with which the contractor must comply:
  - a) The distance from the curb line at which the contractor must place all barriers and the specific width of roadway that must be maintained.
  - b) Whether or not a pedestrian walkway of a specific width must be provided.
  - c) Whether or not Tow Zone signs, with a specific legend as determined by the Transportation Department, are required.
  - d) The contractor is prohibited from parking any vehicle outside the barriers and only vehicles being loaded or unloaded shall be parked within the barriers.
- 2. The officer(s) is responsible for the safe movement of pedestrians past the particular construction site or through congested areas caused by the construction activity.
- 3. The officer(s) is responsible for the safe and efficient movement of vehicular traffic as indicated on the project's Compliance Forms. The officer(s) must be aware that even brief stoppage of traffic to accommodate the contractor can cause gridlock at adjacent intersections. If a Compliance Form is not available, the officer must continue to maintain the normal flow of traffic.
- 4. The officer(s) is specifically responsible for the enforcement of all parking restrictions noted on the project's Compliance Forms as well as any other posted regulations within the immediate vicinity of the construction project.
- 5. The officer)s) shall report any unusual problems associated with the project to the Area Deputy Superintendent, i.e. the potential need to assign additional police at specific times, etc.
- 6. It is particularly important that the officer(s) rigorously enforce the rules and regulations relative to the contractor's vehicles. Also, officer(s) must conform to the same regulations with regard to the parking of their own vehicles.
- 7. The officer(s) shall not close any public roadway or sidewalk for construction-related activities without the written consent of the Transportation Department.
- 8. The officer(s) shall pay particular attention to the effects of construction on signalized intersections and the relationship between adjacent intersections.

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# FREQUENT VIOLATIONS OCCURRING IN THE VICINITY OF CONSTRUCTION SITES

- 1. Occupation of the street and/or sidewalk beyond designated area.
- 2. Use of occupied area for the parking of employees' vehicles.
- Closure of roadways and/or sidewalks for the convenience of the construction project.
- 4. Vehicles accessing the construction project from the wrong direction.
- 5. Improper use of Tow Zone signs and bagging of parking meters without authorization by the Transportation Department.
- 6. Harassment, by construction workers, of the officer authorized to enforce regulations.

## DEFINITIONS OF FREQUENTLY UTILIZED TRAFFIC REGULATIONS

Tow Zone No Parking — This regulation prohibits any vehicle from parking all day. The regulation does allow use by commercial vehicles — those vehicles with commercial plates with a name, address, and telephone number PERMANENTLY displayed on both sides of the vehicle — while actually loading or unloading.

Tow Zone No Stopping — This regulation prohibits ALL vehicles from stopping or parking for any reason.

### TERMS THAT ARE IMPORTANT IN THE OPERATION OF SIGNALIZED INTERSECTIONS:

Cycle Length — The time period form the beginning of the green light to the end of the subsequent red light.

Approach Lanes — All travel lanes approaching a signalized intersection. To maximize the number of vehicles passing through each green cycle, these lanes should be kept clear of obstructions for the distance of at least eight car lengths before and after the intersection.

Traffic Flow Coordination — Signals along streets with multiple signalized intersections are generally coordinated to provide continuous traffic flow. Detail officers should make every effort to not override the timed signal.

Gridlock — No vehicle should be allowed to enter an intersection unless there is sufficient room for the vehicle to pass to the opposite side.

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